

GREEN PROCUREMENT GUIDELINES

(FOR SUPPLIERS)

Ver. 4

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NEC Display Solutions, Ltd.

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1. Introduction

In recent years, there has been increased importance placed in the role of corporations in environmental conservation with the trend towards creating a recycling-oriented society. At our company, environmental soundness is ranked as one of the top priority items in business management. As part of our top priority activities for environmental conservation, we are currently promoting a program of providing "products that reduce environmental impact". To succeed in this endeavor, it is essential to reduce environmental impact of the components and materials constituting such products.

Furthermore, the management stance of the manufacturer toward environmental conservation is also a major factor in implementing green procurement activities. We are committed to procuring environmentally sound products from companies that take a positive stance toward environmental conservation on a priority basis.

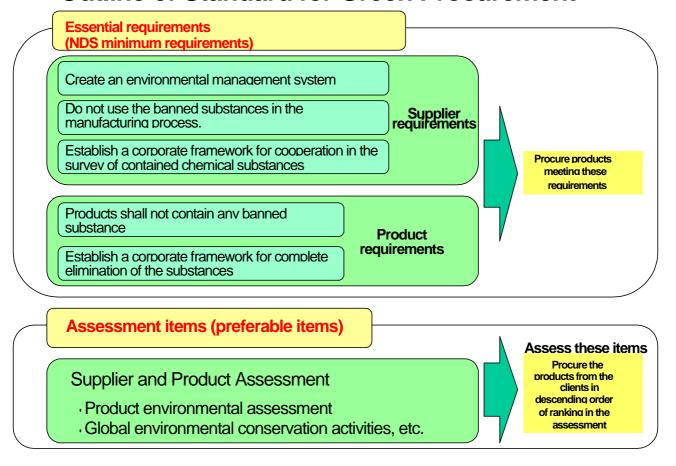
These guidelines present the requirements for green procurement activities in two categories; (1) "Essential requirements" as the minimum requirements to be observed, and (2) "Assessment items" to be taken into account.

When the "essential requirements" are not met, we may have to discontinue our business relationship. For the "assessment items", we will evaluate your products and give priority to procurement of the products with reduced environmental impact.

When a standard other than those set forth in these guidelines is required due to product specification requirements, NEC Display Solutions, Ltd. ("NECDS" or "The Company") will specify such a standard in the purchase specifications, which will be determined separately.

It should be noted that the green procurement standard is subject to revision due to subsequent changes in laws and regulations, and social trends.

Outline of Standard for Green Procurement



2. Scope of Application

These guidelines cover all the products to be procured by NECDS.

The following describes all the products referred to in these guidelines:

Units, parts/components, materials, packing/packaging materials, chemicals, gases, software, services, OEM Products, etc.

3. Essential Requirements for Suppliers

NECDS's major consideration when determining which products to purchase is the degree to which the product in question reduce environmental impact, and whether the companies engaged in the manufacturing and marketing of the products are taking an active stance toward environmental conservation. We will examine the policies of the vendors toward environmental conservation and purchase products from the companies that:

Have an environmental management system established

That is, have an environmental management system in the factory and office where the products are developed, manufactured and marketed. (For details, see (1) in paragraph 6).

Do not use banned substances in the manufacturing process (this does not apply to software manufacturers and service companies)

That is, do not use substances banned by NECDS in the manufacturing process. (For details, see (2) in paragraph 6).

Establish a corporate framework for cooperation in the survey of contained chemical substances (this does not apply to software manufacturers and other suppliers who do not supply hardware products to NECDS)

That is, respond to the questions raised in the survey of chemical substances contained in the product.

4. Essential Requirements for Products

(This section does not apply to software manufacturers and other suppliers who do not supply hardware products to NECDS.)

Production goods (units, parts/components and materials to be incorporated in the NECDS products) are required to have low environmental impact.

To avoid environmental contamination and harm to human health, measures must be taken to prevent hazardous substances from being released when products are used, scrapped or disposed of. By ensuring that the production goods do not contain any substance that may cause damage to the environment or human health, we hope to further promote greener design and disposal activities at NECDS. Thus, we will only procure goods from companies that fulfill the following requirements:

• Shall not contain banned or conditionally banned substances.

Products supplied by you shall not contain banned or conditionally banned hazardous substances that are specified by NECDS. (For more information, see 7-(1)-(1).)

5. Definition of Green Procurement Products

(1) Procured parts incorporated in NECDS Products (this does not apply to software manufacturers and other suppliers who do not supply hardware products to NECDS.)

The units, parts and materials to be incorporated in NECDS products will be procured from the suppliers meeting the requirements set forth under "3. Essential supplier requirements." Products meeting the requirements set forth in "4. Essential product requirements" are called "green procurement products."

(2) Other procured products

The procurement of chemicals, gas, facilities, software and services are determined following consideration of the environmental management stance of suppliers. The environmental assessment of chemicals, gas and facilities will be made according to a pre-procurement assessment (preliminary assessment of chemical substances and facilities), as usual. When considering purchase of intangible products such as software and services, we believe that procurement from the suppliers with an active environmental management system will help in reducing the overall impact on the environment. Consequently, products for which suppliers have developed an environmental management system as set forth in "3. Essential supplier requirements" are considered to be "green procurement products."

Supplier Assessment Items

(1) Creation of an environmental management system (essential requirement)

The factories and offices in charge of final production and packaging of the product are required to establish an Environmental Management System (EMS). Environmental Management Systems certified by a third party organization, e.g., ISO 14001, EMAS (the European "Eco-Management and Audit Scheme"), KES (Kyoto Eco-Management System Standards), Eco-Action 21 (Ministry of the Environment, Japan), and Eco-Stage, are preferable. If you develop your own system, it must include the following as minimum requisites:

Develop environmental policies.

Set up an environmental management organization and appoint an environmental representative.

Identify and comply with environmental laws and regulations.

Plan and implement environmental objectives, goals and programs.

Conduct environmental education and training for employees.

Periodically check and review compliance with the law and practices of environmental activities.

NECDS will check the practice of management of chemical substances contained in the products to be incorporated in the product design and in those to be supplied by manufacturing companies, actually used in these processes.

(2) Environmental pollutants used in manufacturing process (this does not apply to software manufacturers, service companies and such other suppliers who are not involved in manufacturing processes.)

Environmental pollutants used in the manufacturing process should be managed according to the following two categories and :

Table 1 specifies the environmental pollutants.

Banned substances:

That is, substances that may not be used in the manufacturing process by laws and regulations. NECDS, in principle, does not purchase any product from the suppliers which use such substances in the production.

(Essential requirement).

Refrigerants and other substances used in fire extinction are excluded in the scope of these substances.

Substances to be avoided:

That is, substances that should be avoided or minimized in the manufacturing process according to a discretionary target. If you still use such substances in your production line, you are requested to reduce their use with a view to complete elimination in the future.

Table 1 Environmental pollutants used in manufacturing process

Classification	No.	Substance name	Applicable laws and regulations
Banned	1	CFC	
substances	2	1.1.1-trichloroethane	Montreal Protocol
	3	Carbon tetrachloride	Law Concerning the Protection of the
	4	halon	Ozone Layer
	5	HBFC	
	6	Methyl bromide	Montreal Protocol (Complete elimination in FY 2005)*
Substances to be avoided	7	HCFC	Montreal Protocol (Complete elimination in FY 2020)*
470.404	8	Trichloroethylene	
	9	Tetrachloroethylene	Water Pollution Control Law
	10	Methylene chloride	

^{*}Regulation schedule for developed countries in Montreal Protocol (December 1998)

(3) Implementing the product environmental assessment (this does not apply to software manufacturers, service companies and such other suppliers who are not engaged in hardware design.)

You are requested to perform environmental assessment when designing products so as to reduce the environmental impact of the product at the design stage.

Product environmental assessment is a preliminary assessment that considers environmental factors at the design stage based on the concept that matters such as global warming, resource recycling, elimination of environmental pollutants, should be taken into account at the design stage so as to promote the production of products that use little in the way of resources or energy.

To get a better idea of how to implement product environmental assessment, please try assessing at the design stage the products described in "7. Factors for product assessment."

(4) Commitment to global environmental conservation

In your commitment to global environmental conservation, we request that you make efforts to achieve the following:

Reduction or complete elimination of the substances that may cause global warming

Reduction in waste generation

Management of chemical substances

Reduction in resource consumption

Reduction in the impact of package and packaging materials upon environment

Environmental assessment (control of air pollution, water pollution, ground contamination, noise, vibration, etc.)

(5) Green procurement

We request that you establish your own standards for green procurement, and apply these standards to your procurement of product components and materials.

(6) Public disclosure of environmental information

We request that you make regular public releases of information on your commitment and achievements concerning environmental conservation.

7. Product Assessment Items

(This section does not apply to software manufacturers and other suppliers who do not supply hardware products to NECDS.)

(1) The environmental pollutants¹⁾ contained in the product should be controlled according to the following two categories. Table 2 indicates environmental pollutants contained in products.

Banned or conditionally banned substances (Requisite):

These substances must not be contained in the product pursuant to the Japanese or foreign law or NECDS's self-active restriction. NECDS will not purchase any product containing these substances.

Conditionally banned substances shall conform to the conditions to be specified by NECDS each individually.

(Reference standard: EKSS-011, "Standard for Procurement Restriction on Chemical Substances Contained in Supplied Products")

Some products are not subject to the restriction on conditionally banned substances. You are suggested to check applicable drawings or specifications, or check with the ordering division on the restriction.

Controlled substances:

These are substances whose level of content in each product is subject to control. You are requested to disclose the type and content of these substances, if any, contained in the products you supply to NECDS. We will control the amount of these substances present in our products so that we can avoid or reduce the use of them in accordance with applicable laws and regulations and with environmental protection needs and performance requirements, which may change from time to time depending on the actual development or improvement of ecological conditions.

Note:

Environmental pollutants: substances affecting the environment and human health that are
to be controlled by laws, regulations or voluntary control programs as defined by NECDS.
The pollutant list below is based on the substances defined by the "Japan Green
Procurement Survey Standardization Initiative (hereafter, referred to as JGPSSI)."

Table 2 Environmental Pollutants Contained in Products

Classifi-	:4:		Target date
cation	No.	Name of substance group	
Cation			abolition
	1	PCB (Polychlorinated byphenyl)	Immediately
ses	2	Polychlorinated naphthalenes (with more than 3 chlorine atoms)	Immediately
anc	3	Bis (tributyltin) oxide	Immediately
bst	4	Tributyltin compounds and triphenyltin compounds	Immediately
ns	5	Asbestos	Immediately
Banned substances	6	Short-chained chlorinated paraffin (carbon number: 10-13, chlorine content: 50 wt%)	Immediately
ш	7	Ozone depleting substances (Montreal Protocol on Substances: Class I)	Immediately
ے ا	8	Cadmium and its compounds	Immediately
wit	9	Lead and its compounds	Immediately
eq	10	Mercury and its compounds	Immediately
ann	11	Chromium VI compounds	Immediately
s ba	12	PBB (Polybrominated biphenyl)	Immediately
nces banne conditions	13	PBDE (Polybrominated diphenyl ether)	Immediately
Substances banned with conditions		Nickel and its compounds (Scope: components that come into contact with human body.)	Immediately
S	15	Azo dye (Scope: components that come into contact with human body.)	Immediately
	16	Antimony and its compounds	
တ္	17	Arsenic and its compounds	
nce	18	Beryllium and its compounds	
sta	19	Bismuth and its compounds	
qns	20	Selenium and its compounds	
p _e	21	Bromine flame retardant (Except for PBB and PBDE)	
Controlled substances	22	Phthalate ester	
ont	23	Ozone depleting substances (Montreal Protocol on Substances: Class II)	
ن	24	Poly vinyl chloride	
	25	Radioactive substances	

- For detailed information on banned or conditionally banned substances, refer to EKSS-011, "Standard for Procurement Restriction on Chemical Substances Contained in Supplied Products")
- 2) For the specific names, chemical formulae, applicable environmental legislation and other information about the substances belonging to each group, see the guidelines, manuals and other documents issued by JGPSSI.

(2) Resource and energy conservation

We request that your products are designed to minimize resource and energy consumption in their manufacturing, distribution and usage. Accordingly, they should:

Consume minimum power in both the operation and standby modes.

Be compact and light in weight.

Use minimum volume of rare resources.

(3) Long lifetime

Parts should be designed to have a long life while units should be designed to enable easy repair and parts replacement.

(4) Use of recycled parts and materials

Recycled parts and materials should be used wherever possible.

(5) Easily recyclable materials

Products should be made of easily recyclable materials and designed so that same-material parts can be removed separately to promote material recycling.

(6) Labeling plastic type

Molded parts weighing more than 25g must be marked with a label indicating the type of plastic/ composite material in accordance with the JIS Standard. Whenever possible such labeling should be provided even on parts of less than 25 grams.

- JIS K 6899 (ISO1043-1) "Plastic symbol Part 1: Basic polymers and their characteristics"
- JIS K 6899-2 (ISO1043-2) "Plastic symbol Part 2: Filler and reinforcing agent)"
- · JIS K 6999 (ISO11469) "Plastic Identification and indication of plastic products"

8. Operation of Green Procurement System

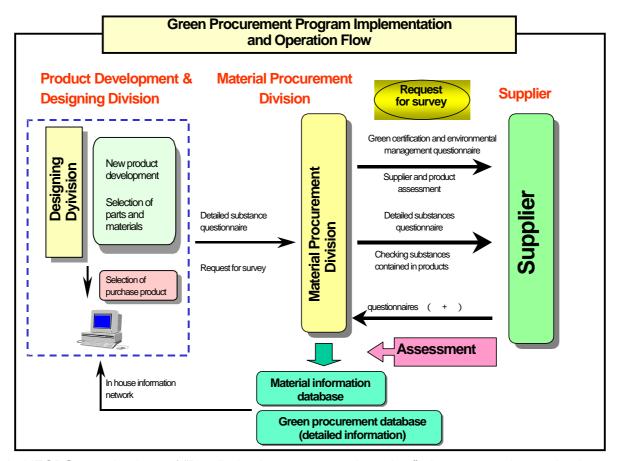
The green procurement system will be operated as follows:

- (1) Supplier assessment
 - Each supplier is requested to disclose information on their management view and policy with respect to products and environmental conservation based on our green procurement standard.
 - 2) We evaluate the overall level environmental management within the company, including the state of environmental management system.
 - 3) We shall check whether or not banned substances are being used in manufacturing processes (Table 1).
 - 4) We shall check your supplied products to ensure that they are free of banned and conditionally banned substances (Table 2).
 - 5) We check if you are prepared to reply to our detailed questionnaire on "Environmental Pollutants Contained in Products" (Table 2), if any and the amounts.

- (2) Product-by product examinations
 - If your products contain environmental pollutants (Table 2), their volumes are checked: NECDS requests each supplier to survey all the product you supply to NECDS.
 - 2) Each supplier is requested to submit the survey result to NECDS in "Green Procurement Survey tool".

NOTE:

- * Use the format specified by JGPSSI as "Green Procurement Survey tool".
- NECDS categorizes "Ozone depleting substances" into the following two categories: "Banned substances" and "Controlled substances" (See No.7 and No. 23 of Table 2 Environmental Pollutants Contained in Products). But the survey should cover the 24 substance group, unless NECDS specify spicilally.
- 3) In principle, environmental pollutants contained in the products should be submitted upon initiation of the transactions for products to be supplied.
- (3) If important change in your reply after returning your questionnaire, you are requested to notify us of the details of such change.
- (4) Individual provisions concerning green procurement may be included in the basic agreement, memorandum, purchase specifications etc., as wherever required. In such cases, the individual specifications shall take preference.
- (5) Based on the information provided by suppliers, NECDS will select and procure better, greener products.
- (6) Any and all information received from suppliers will be treated with the highest confidentiality.



Note) In NECDS examinations of "Detailed substances questionnaires", the person who are in charge of engineering may ask them to you directly.

[Revision History]

Revisions to Ver. 2 (March 2005):

- * Part of " (1) Creation of an environmental management system" of Section 6, Supplier Assessment Items, revised as follows:
 - (1) Eco-Action 21 (Ministry of the Environment, Japan) and Eco-Stage added as third party certifications.
 - (2) Text of (1)- and (1)- modified.
- * Additional modifications include:
 - -Notes on exclusion of software manufacturers and service companies added
 - -Importance of management of substances contained in supplied products clearly indicated
 - -Methyl bromide added to banned substances in the manufacturing process (classification change, Table 1)
 - -Environmental pollutants standard revised (target substances, classification, etc.)
 - -The Company's "Standard for Procurement Restriction on Chemical Substances Contained in Supplied Products" and JGPSSI guidelines cited as reference; duplications deleted
 - -Implementation of RoHS compliance check set forth
 - -Change of issuing organization

Revisions to Ver.3 (August 2007)

*Change of company name and abbreviation

- -NEC Viewtechnology, Ltd. => NEC Display Solutions, Ltd.
- NVT => NDS

Revisions to Ver.4 (January 2008)

*Change of company abbreviation

- NDS => NECDS

*Delete the deadline of EMS Establishment (6-1)

*Use The JGPSSI Format (8-2)

*Addition of the contact person "Detailed substances questionnaires" (8-6)

Revised: January 2008

Issued by:

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^{*}Change of issuing division name